

AMENDMENTS TO THE CLAIMS

Claim 1. (Currently Amended)

An optical disk device comprising:

rotating means for rotating an optical disk;

motor control means for controlling a number of revolutions of the rotating means;

focusing means having a lens to read a signal which is recorded in a recording layer of the optical disk;

servo control means that performs a focus pull-in operation based on a focus error signal and a tracking error signal which are obtained from the focusing means thereby to control a position of the lens;

memory means having a data table in which initial values and correction values of a plurality of adjustment items including a rotational speed of the optical disk, a moving speed of the lens and the amount of movement of the lens are described; and

logic operation means that issues a correction command of the plurality of adjustment items to the servo control means and determines under respective adjustment conditions whether or not the focus pull-in operation is successfully performed and that in a case when it determines that the focus pull-in operation is not successfully performed, changes position of data read from the data table so as to read correction values, newly sets the respective correction values which are stored in the data table in the memory means to the servo control means, sets the correction value of the rotational speed of the optical disk and moving speed of the lens and repeats the focus pull-in operation until it determines that the focus pull-in operation is successfully performed

wherein the memory means has a data table in which a relationship between an ambient temperature obtained from temperature detection means and the amount of movement of the lens of the focusing means is described, and the logic operation means uses the amount of movement of the lens corresponding to the ambient temperature obtained from the temperature detection means as an initial value which is set to the servo control means.

Claim 2. (Previously Presented)

The optical disk device as claimed in claim 1, wherein the memory means keeps the correction values which are set to the servo control means by the logic operation means, as the initial values which are newly set to the servo control means, in a case when the logic operation means determines that the focus pull-in operation is successfully performed, and hold the newly set initial values in the data table until the optical disk is removed.

Claim 3. (Cancelled)

Claim 4. (Currently Amended)

An optical disk device, comprising:
a lens that focuses on an optical disk;
a controller that controls the focusing position of the lens;
a memory that stores initial data values used by the controller to initially set the lens focusing position based on rotational speed of the disk and moving speed of the lens and also stores correction data values used to perform correction of the lens position after the initial setting of the lens focusing position; and
a central controller that determines if the lens focusing position is correct at the initial data values and if the focusing position is not correct, changes data read from the memory to the ~~determines if~~ correction data values for the rotational speed of the disk and moving speed of the lens ~~need to be~~ used to position the lens properly if the lens focusing position is not correct using the initial values,
an ambient temperature measuring device that measures the ambient temperature ~~in proximity to the disk~~, where the initial data values are adjusted according to the measured ambient temperature;
wherein the correction data values, if used to properly position the lens focusing position, are stored in the memory as the initial data values.

Claim 5. (Canceled)

Claim 6. (Currently Amended)

A method of performing a focusing operation in an optical disk device, comprising the steps of:

adjusting a focus position of a lens onto a disk using initial data values stored in a memory;

determining if the focus position using the initial data values is properly positioned;

measuring the ambient temperature ~~in proximity to the disk~~, where the initial data values are adjusted according to the measured ambient temperature;

adjusting the focus position from the initial data values using correction data values stored in the memory if it is determined that the focus position using the initial data values is not properly positioned;

determining if the focus position using the corrected data values is properly positioned;

if it is determined that the focus position is correct storing the corrected data values in the memory as the initial data values, and if it is determined that the focus position is not correct using the corrected data values obtaining another corrected data values from the memory and adjusting the focus position using the another corrected data values until the focus position is correct and storing the another corrected data values from which the correct focus position is determined in the memory as the initial data values.

Claim 7. (Canceled)